UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/575,000	04/07/2006	Norihide Mizoguchi	112780-053	2283	
	7590 12/05/200 TELLECTUAL PROPE	-	EXAM	INER	
P. O. BOX 708			EXAMINER LOPEZ, FRANK D ART UNIT PAPER NUMBER 3745	LOPEZ, FRANK D	
NORTHBROO	OK, IL 60065	•	ART UNIT	PAPER NUMBER	
			3745		
•					
			MAIL DATE	DELIVERY MODE	
			12/05/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

			61
	Application No.	Applicant(s)	
,	10/575,000	MIZOGUCHI ET AL.	
Office Action Summary	Examiner	Art Unit	,
	F. Daniel Lopez	3745	
The MAILING DATE of this communication appeared for Reply	ppears on the cover sheet w	vith the correspondence address -	-
A SHORTENED STATUTORY PERIOD FOR REP WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory perior - Failure to reply within the set or extended period for reply will, by statuent Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUN 1.136(a). In no event, however, may a d will apply and will expire SIX (6) MO ate, cause the application to become a	ICATION. Treply be timely filed NTHS from the mailing date of this communical ABANDONED (35 U.S.C. § 133).	
Status			
1) Responsive to communication(s) filed on 18	September 2007.		·
2a)⊠ This action is FINAL . 2b)☐ Th	nis action is non-final.		
3) Since this application is in condition for allow	rance except for formal ma	tters, prosecution as to the merits	; is ·
closed in accordance with the practice under	Ex parte Quayle, 1935 C.	D. 11, 453 O.G. 213.	
Disposition of Claims			
4) Claim(s) 1,3-6,8 and 9 is/are pending in the	application.		
4a) Of the above claim(s) is/are withdr	awn from consideration.		
5) Claim(s) 9 is/are allowed.			
6) Claim(s) <u>1 and 4-6</u> is/are rejected.			
7) Claim(s) <u>3 and 8</u> is/are objected to.			
8) Claim(s) are subject to restriction and	or election requirement.		
Application Papers			
9) ☐ The specification is objected to by the Exami	ner.		
10) The drawing(s) filed on is/are: a) □ ac	ccepted or b) objected to	by the Examiner.	
Applicant may not request that any objection to the	ne drawing(s) be held in abeya	ance. See 37 CFR 1.85(a).	
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the			
Priority under 35 U.S.C. § 119			
12)⊠ Acknowledgment is made of a claim for foreig a)⊠ All b)□ Some * c)□ None of:	gn priority under 35 U.S.C.	§ 119(a)-(d) or (f).	
1. Certified copies of the priority docume	nts have been received.		
2. Certified copies of the priority docume	nts have been received in	Application No	
3. Copies of the certified copies of the pr	iority documents have bee	n received in this National Stage	
application from the International Bure	eau (PCT Rule 17.2(a)).		
* See the attached detailed Office action for a li	st of the certified copies no	t received.	
Attachment(s)			
1) Notice of References Cited (PTO-892)		Summary (PTO-413) o(s)/Mail Date	
Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date		Informal Patent Application	

Art Unit: 3745

Response to Amendment

Applicant's arguments filed September 18, 2007, have been fully considered but they are not deemed to be persuasive.

Applicant's arguments with respect to claims 1 and 4-6 have been considered but are deemed to be moot in view of the new grounds of rejection. The new grounds of rejection are necessitated by part of claim 2 being added to claim 1; and part of claim 2 being added to claim 4.

Applicant argues that Saotome does not disclose a cutoff of the communication between the accumulator and the actuator. Claim 1 claims "a ride control valve for switching a communicating state and a cutoff state between the accumulator and the actuator" (line 10-11). The examiner indicates that the ride control valve (42) of Saotome includes a communicating state (f) and a cutoff state (e), wherein the cutoff state prevents flow from the actuator to the accumulator. Since applicant has not specific what type of cutoff state the valve has, it is understood that this cutoff state meets this limitation.

Applicant argues that Japan 06-330,535 uses a pressure differential before and after a variable throttle between the accumulator and the actuator to control the throttle opening, which is different from how the present invention works. This may be true, but there is no limitation in the claims as to how the valve is controlled, except that the load pressure of the actuator controls it. Therefore, this limitation is met by the combination of references.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 112

Claims 4-6 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 3745

In claim 4 line 4-5 "the communication opening area is controlled by the detected signal from the first pressure sensor and/or the travel state detecting sensor" is confusing. Claim 1, from which claim 4 depends, claims that the opening area is controlled by the pressure signal. The "or" appears to contradict the limitation of claim 1, in that the opening area can be controlled without using the pressure signal.

Claims 5 and 6 are indefinite, since they depend from claim 4.

Double Patenting

Applicant is advised that should claim 5 be found allowable, claim 6 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k). Claim 5 claims that if A (load pressure or speed) increases, B (opening) decreases; whereas claim 6 claims if A, decreases, B increases. They are the different ways of saying the same thing.

Claim Rejections - 35 USC § 103

Claims 1 and 4-6 are rejected under 35 U.S.C. § 103 as being unpatentable over Saotome in view of Yamashita and Japan 06-330,535. Saotome discloses a working vehicle comprising a directional control valve (30) controlling pressure oil supplied from a pump (20) to an actuator (50); a ride control valve (42), in a control block (40) controlling communication between an accumulator (53) and a pressure chamber (e.g. 52) of the actuator; wherein the lines connecting the directional control valve to the actuator are shown schematically as going through the control block; but does not specifically state that the ride control valve is arranged on the directional control valve in a laminated manner by internal piping; but does not disclose that a first pressure sensor detecting a load pressure of the actuator or a travel state detecting sensor detecting a travel state generates a signal, which is used to control an opening area of the ride control valve, such that as the load pressure or speed increases, the opening decreases.

Application/Control Number: 10/575,000

Art Unit: 3745

Yamashita shows first and second control valves (fb); wherein the second valve is part of a second control block; and wherein lines connected to the first control valve are shown schematically as going through the second control block (fig 3); that the schematic means that the second control valve is arranged on the first control valve in a laminated manner by internal piping (fig 4, column 1 line 36-38).

Since Yamashita teaches how the schematic of Saotome is physically assembled; then the schematic of Saotome means that the ride control valve is arranged on the directional control valve in a laminated manner by internal piping. If not, it would have been obvious at the time the invention was made to one having ordinary skill in the art to arrange the ride control valve of Saotome on the directional control valve in a laminated manner by internal piping, as taught by Yamashita, as a matter of engineering expediency.

Japan 06-330,535 teaches, for a working vehicle comprising a directional control valve (4) controlling pressure oil supplied from a pump (1) to an actuator (2); a ride control valve (8), controlling communication between an accumulator (7) and a pressure chamber (via 11) of the actuator; that first and second pressure sensors (10a, 10b, respectively) detecting a load pressure of the actuator and an accumulator pressure, respectively, generates signals, which are used to control an opening area (8a) of the ride control valve, such that as the load pressure increases (relative to the pressure of the accumulator), the opening decreases, for the purpose of suppressing the vibration with good response (abstract, last line).

Since Saotome and Japan 06-330,535 are both from the same field of endeavor, the purpose disclosed by Japan 06-330,535 would have been recognized in the pertinent art of Saotome. It would have been obvious at the time the invention was made to one having ordinary skill in the art to have first and second pressure sensors detecting a load pressure of the actuator and an accumulator pressure, respectively, of Saotome, which generates signals, which are used to control an opening area of the ride control valve, such that as the load pressure or speed increases, the opening decreases, as taught by Japan 06-330,535, for the purpose of suppressing the vibration with good response.

Application/Control Number: 10/575,000 Page 5

Art Unit: 3745

Conclusion

Claim 9 is allowed.

Claims 3 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Lopez whose telephone number is 571-272-4821. The examiner can normally be reached on Monday-Thursday from 6:00 AM -4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Look, can be reached on 571-272-4820. The fax number for this group is 571-273-8300. Any inquiry of a general nature should be directed to the Help Desk, whose telephone number is 1-800-PTO-9199.

IF. Daniel Lopezl

F. Daniel Lopez Primary Examiner Art Unit 3745 November 26, 2007